Port Gamble S'Klallam fisheries staff haul in a beach seine as part of an effort to monitor the migration of young salmon.

Tribal Fisheries Management

Introduction

Indian tribes have always lived on every major watershed in what is now the State of Washington. From time immemorial, tribal cultures, spirituality and economies have centered on fishing, hunting and gathering the natural resources of this region.

In the mid-1850s, when the United States sought to make land available for settlement in what is now the State of Washington, the tribes signed treaties through which they reserved that which was most important to them. Among those reserved rights was the right to harvest salmon in all of their usual and accustomed fishing places.

The promises of the treaties were broken in the years that followed. When tribal members tried to exercise their treaty-reserved rights, they were jailed and their catches confiscated. In 1974 the promises of the treaties were finally upheld when a federal district court reaffirmed the tribes' reserved rights in *U.S. v. Washington,* also called the Boldt Decision. The ruling, subsequently upheld by the U.S. Supreme Court, established the tribes as co-managers of the salmon resource along with the State of Washington.

Tribal fisheries management programs have evolved to fulfill the tribes' roles as co-managers of the salmon resource. Early in the 1980s, with only a few years to gain expertise, tribes began substantial participation in fisheries planning. As court involvement in the planning process faded away, the tribal and state co-managers began to work cooperatively to develop joint salmon management plans.

Today, tribes operate comprehensive programs addressing every aspect of natural resource management, from water quality, to forest management, shellfish, wildlife and more. Tribal fisheries management has continued to evolve as emerging fisheries have gained new importance and the challenge of managing salmon continues to grow.

Tribal Fisheries Management Programs

Many tribes have a natural resources director who oversees natural resource management activities. Tribes typically maintain a fisheries management program with a manager who oversees staff working in the areas of harvest management, enhancement and habitat. In some cases, several tribes have joined together to form collective fishery management organizations.

The fisheries manager receives direction from the tribal fish committee and tribal council, which balances harvest needs with obligations to the resource. Along with tribal harvest staff, the fisheries manager develops fishery plans and run size forecasts, assesses spawning escapement needs and monitors stock status, among other duties. By assessing in-season run sizes, tribal fisheries staff are able to issue up-to-date regulations in respect to changing conditions.

The tribal hatchery manager, with the aid of support staff, implements the tribe's enhancement program, overseeing hatchery programming and production.

According to the most recently available statistics, treaty Indian tribes in western Washington released over 42 million healthy young salmon from tribal hatcheries in 2003. The tribes are active participants in the Hatchery Reform Project under way in western Washington. The program, now in its fifth year, is aimed at helping to conserve naturally spawning salmon populations and supporting sustainable fisheries.

As valuable salmon habitat disappears, tribal habitat staff work hard to protect and restore remaining spawning and rearing habitat. Tribes monitor activities, such as irrigation, forest practices and urban growth, which could impact salmon habitat. Tribes also conduct extensive in-stream habitat improvement and restoration projects.

Each tribe or tribal cooperative also maintains an enforcement program to ensure that fishing regulations are observed by tribal members. Tribal enforcement officers work cooperatively with state and federal fish and wildlife enforcement personnel to protect natural resources. Violations of tribal fishing laws are referred to tribal courts for prosecution.

The tribes also conduct a treaty fisherman identification and vessel registration program. When a treaty fisherman sells his catch, his identification number is included on a fish receiving ticket that records the number, weight, species and location of harvest. The information is an important part of the Treaty Indian Catch Monitoring Program managed by the Northwest Indian Fisheries Commission. Catch data, which is critical to harvest management, is shared on a same-day basis with the Washington Department of Fish and Wildlife (WDFW).

Salmon Management

From the moment of its birth, a Pacific Northwest salmon begins an epic journey through waters off the U.S. and Canadian coasts and through waters in the North Pacific before returning to the stream of its birth to spawn and die.

Fisheries in Puget Sound, the Strait of Juan de Fuca and nearshore coastal waters are co-managed by the treaty Indian tribes and WDFW.

As a sovereign government, each tribe regulates and coordinates its own fishery management program within its specific, adjudicated Usual and Accustomed fishing area. Tribal management jurisdiction includes six species of salmon, halibut, bottom fish, shellfish and other marine species. Tribes conduct fisheries off the Washington coast, in coastal rivers and bays, and throughout the inland waters of Puget Sound and its tributaries.

WDFW manages the state's share of the salmon resource, as well as other food fish and shellfish for commercial and sport user groups.

Tribal and state managers work cooperatively through two overlapping processes, the Pacific Fisheries Management Council (PFMC) and the North of Falcon process (NOF), to shape fishing seasons that protect the weakest salmon stocks. The PFMC is a public forum established by the federal government and is charged with creating a comprehensive fisheries plan, including the varied interests of tribal, state and federal managers, commercial and sport fishing groups and environmental groups.

While the PFMC is planning ocean fisheries, treaty tribes and states of Oregon and Washington in the NOF process are outlining their inshore and coastal fisheries. The North of Falcon process is so named because it deals with fisheries north of Cape Falcon, Oregon, to the U.S./Canada border. Through NOF, tribal and state biologists forecast expected salmon returns to specific areas. Population estimates are based on biological data collected during salmon migration, along with habitat information and weather conditions that also effect salmon populations. The number of fish available to harvest, determined through NOF, is what is left after escapement needs are met. Escapement is the number of fish needed to spawn and perpetuate a run at a desired level.

Adult salmon returning to Washington migrate through both U.S. and Canadian waters and are harvested by fishermen from both countries. The 1985 Pacific Salmon Treaty, developed through cooperation by the tribes, state governments, U.S. and Canadian federal governments, and sport and commercial fishing groups, helps fulfill conservation goals and the right of each country to reap the benefit of its own fisheries enhancement efforts.

The treaty is implemented by the eight-member bilateral Pacific Salmon Commission (PSC), which includes representatives of federal, state and tribal governments. The PSC does not regulate salmon fisheries, but provides regulatory advice and recommendations, and a forum for the two countries to reach agreement on mutual fisheries issues. Three regional panels provide technical and regulatory advice to the PSC. In years when treaty agreements are not reached, the tribes have worked to ensure fisheries are still managed responsibly. Indian and non-Indian harvests are taken from a portion of the run surplus to escapement needs of the stock, or from a percentage of the overall run size.

In-season management between treaty tribes and the state is an ongoing process during the fishing season. While the agreements during NOF outline the goals of the upcoming fisheries, in-season planning is the process of how those goals evolve into on-the-ground fisheries. By looking at fishing effort, weather conditions and several other factors that could not be foreseen in preseason meetings, the tribes and the state shift fisheries to best protect the salmon resource. Each tribe regularly issues "emergency regulations," in addition to their annual fishing regulations, that reflect these changes. Emergency regulations, usually issued about a week or two in advance, outline the days that can be fished and the reason for the fishery.

In addition to serving at the policy level on the PSC and its panels, tribal representatives also participate on the many committees and work groups providing technical support for the treaty's implementation. Tribes also conduct research as an integral part of the treaty's implementation.

2004 Tribal Fisheries Program Activities

Following are some examples of tribal fisheries management activities during the past year:

Lower Elwha Klallam Tribe

With the help of the Lower Elwha Klallam Tribe, a stretch of Ennis Creek that flows through Jim and Robbie Mantooth's property is being restored into a more fish-friendly environment. The tribe is restoring habitat in the creek by adding wood that will slow the stream's flow and help form pools and trap much-needed gravel, creating a healthier habitat for salmon, trout and other wildlife.

Throughout the past century, the lower stretch of Ennis Creek has been altered by logging practices, and more significantly, by development. Important streamside vegetation has been removed to accommodate urban and industrial development, degrading salmon spawning and rearing habitat. Stormwater runoff affects the creek's water quality, and problems with the Highway 101 culvert make it difficult for fish to access spawning habitat. As a result, fish populations in Ennis Creek have declined to critically low levels.

The goal of the project is to help bring those fish populations back to their once abundant numbers by repairing the habitat. Large woody debris and rocks are being placed in the creek to slow the river and prevent the destruction of salmon redds during high winter flows. The logjams also will provide shelter for juvenile fish and create pools and riffles for spawning salmon that return to Ennis Creek.

"We are trying to repair the creek's habitat and create a better environment for salmon and other wildlife in this area," said Mike McHenry, fisheries habitat manager for the Lower Elwha Klallam Tribe. "We will be doing another restoration project on Ennis Creek later this summer on property owned by the City of Port Angeles. These two restoration projects, however, won't solve Ennis Creek's habitat problems altogether."

Before the arrival of non-Indians, the mouth of Ennis Creek was a culturally significant site for the Lower Elwha Klallam Tribe. Located near the estuary was Y'innis, a large settlement that was home to the Lower Elwha Klallam Indians for thousands of years. Y'innis, which means "good beach," was one of two Klallam villages located in what is now Port Angeles harbor.

Puyallup Tribe of Indians

Increased harvest by Canadian fishermen resulted in sharply lower chinook salmon fishing seasons on the Puyallup River this year. The Puyallup Tribe cut its entire chinook season by half and shared an expected harvest of 3,000 Puyallup River chinook with non-tribal sport fishermen.

"There was a substantial increase in the amount of chinook caught in Canadian fisheries," said Chris Phinney, fisheries biologist for the Puyallup Tribe. Canadian fishermen were permitted to fish at the higher end of allowed levels as agreed to under the Pacific Salmon Treaty between the U.S. and Canada.

"It may seem like the tribe's fishing is highly concentrated on the Puyallup River, but the sharing principle is maintained because the state has fisheries open throughout western Washington that impact Puyallup salmon," said Joe Anderson, tribal fisheries manager. "While sport fishermen are able to fish throughout the state, Puyallup tribal fishermen will only fish for Puyallup River chinook on the Puyallup River."

Suquamish fisheries staff sort through a beach seine used in a study to gauge interaction between hatchery and wild salmon.

"All impacts on returning salmon are taken into account during our pre-season planning," said Anderson. "Our goal in planning fisheries is to have enough salmon make it back to the spawning grounds to sustain the run." Tribal enforcement staff are present during every salmon opening. Fisheries management staff, collecting important run size and harvest data, are also monitoring the fishery.

"We keep a close eye on our salmon fisheries," said Anderson. "The tribe has always protected salmon. We want salmon to return to the Puyallup River for centuries to come."

Skagit River System Cooperative: Sauk-Suiattle And Swinomish Tribes

The key to big salmon runs may lie in small sections of habitat, scientists at the Skagit River System Cooperative (SRSC) are finding. According to the tribal consortium's research, pocket estuaries are exceptionally important for the imperiled Skagit River chinook salmon.

"Our research is designed to reach one goal: the recovery of Skagit River chinook salmon," said Lorraine Loomis, fisheries manager with the Swinomish Tribe. Skagit River chinook are listed as "threatened" under the federal Endangered Species Act. "This pocket estuary work has a lot of promise, and could help us toward that goal," she said. SRSC is the natural resources arm of the Swinomish and Sauk-Suiattle tribes.

For the past 10 years, scientists at SRSC (and its predecessor, the Skagit System Cooperative) have been studying every aspect of chinook salmon life history in the area. Learning how salmon fry migrate through the Skagit River delta, for example, has revealed that lost delta habitat and pocket estuaries are significantly limiting how many chinook the river can produce.

The tribal natural resources organization is now finding that, in the marine waters around the Skagit River delta, chinook congregate in pocket estuaries. A pocket estuary, like its larger counterpart, is a partially enclosed marine body of water where the salt water is diluted by freshwater. The difference is that pocket estuaries are much smaller – some in the Skagit basin are 4 acres or less. Chinook and other fish simply love pocket estuaries, using these sheltered habitats to feed, hide from predators, and prepare for their transition to the open ocean.

Because these areas are often low-bank waterfront property, though, people love pocket estuaries too – and love them to death in many cases. Of the 114 such sites that SRSC has identified, development has devastated about 80 percent.

The SRSC study covers an area stretching from Deception Pass in the north to Possession Sound in the south. To cover this wide swath of nearshore habitat, SRSC has teamed up with the Tulalip, Stillaguamish and Samish tribes.

"By learning about salmon use patterns – what pocket estuaries they use and why – we can prioritize our restoration efforts better," said Aundrea McBride, SRSC research ecologist. "We hope this research will be a foundation for establishing habitat preservation priorities in other regions as well."

Researchers stress that pocket estuaries, however important, are not the lone silver bullet for salmon recovery.

Other tribal salmon management activities included:

- Implementing salmon habitat restoration, research, wild stock supplementation and other projects as part of the Pacific Coastal Salmon Recovery initiative.
- Conducting extensive data collection and monitoring necessary for Pacific Salmon Treaty implementation.
- Developing inter-tribal allocation plans to allow harvest opportunities for all tribes while protecting weak salmon runs.
- Closely monitoring fishery harvest levels to ensure targets were not being exceeded and conducting in-season test fisheries to update run forecasts.
- Collecting and compiling catch data in cooperation with the state for fisheries management planning and allocation.
- Conducting spawning surveys to confirm estimates of the number of salmon needed to sustain salmon runs at a desired level.
- Releasing more than 42 million healthy salmon and steelhead from tribal hatcheries in western Washington waters. Both Indians and non-Indians will harvest returning adults.
- Participating in cooperative enhancement projects with state and federal agencies, sportfishing groups and others.
- Tagging nearly 4 million juvenile hatchery salmon to obtain information on ocean survival, hatchery program effectiveness and other factors.
- Conducting salmon habitat restoration projects on rivers throughout western Washington, such as repairing and replacing culverts and placing logs into streams to create rearing habitat.

For More Information

For more information about the natural resource management activities of the treaty Indian tribes in western Washington, contact the Northwest Indian Fisheries Commission, 6730 Martin Way E., Olympia, WA 98516; or call (360) 438-1180. Visit the NWIFC Web site at www.nwifc.org.